

REMARKS

In response to the office action of January 28, 2008, please amend the above-identified application. Claims 1-41 and 43 are cancelled. Claims 42 and 44 were previously withdrawn. Claims 45-68 are in the application.

Claim 67 was objected to because of the informality (misspelling).

Claim 67 has been amended to correct the misspelling.

Claims 46-48, 58, 61, 63-68 were rejected under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 46, 63, 64, 65, 66, 67, and 68 have been amended. Claims 47, 48, 58 and 61 are dependent on claim 46 which has been amended.

Claims 45-62 and 66 were rejected under 35 USC 102(e) as being anticipated by US Patent 6787783 issued to Marchman et al.

As stated above, Marchman et al. has been removed as a reference and therefore arguments articulating patentability over Marchman are not set forth.

Response to Primary Examiner's statements in regard to US Patent 6,677,586 issued to Nasser-Ghodsi et al. (hereinafter, Nasser-Ghodsi) in view of US Patent 5,665,277 to Johnson et al. (hereinafter, Johnson) on pages 5 and 6 of the January 28, 2008 office action.

The following further remarks are submitted for consideration of the Primary Examiner in view of the comments in "Response to Arguments" section, pages 5-6, of the office action of January 28, 2008.

In regard to the statements on pages 5 and 6 under "Response to Arguments", where

the examiner states that he is not convinced by applicants earlier arguments and that earlier rejections based on Nasser-Ghodsí are not specifically relied upon herein, the following further remarks are made to demonstrate the non-equivalence of laser and electron beam heating.

It is not accurate to equate laser heating and electron beam heating as the absorption of electrons and light in a target material is completely different. This can easily be seen in a normal environment where light can spread out, but not free electrons as electrons are absorbed by air molecules. In US 6,677,586 (Nasser-Ghodsí) it is stated in column 6, lines 34 to 49 that the laser light has to be adjusted with respect to its wave length in such a way that it will be highly absorbed by copper chloride, but has only a low absorption in copper. Nasser-Ghodsí tunes for heating the copper chloride only by the laser light. A similar reaction is, however, not given by electron heating, as the absorption of electrons in copper chloride and copper is very similar, i.e. both areas are similarly heated through electron beams. These considerations show that maybe electron beam heating and laser heating might be equivalent to each other when used for manufacturing nano particles, but not when it comes to masks/templates or similar objects having different materials on their surface and which have to be treated locally. The selected heating, as desired by Nasser-Ghodsí, would not be obtained, when using an electron beam for heating. Thus, it is not believed proper to consider both heating methods as equivalent. This is also particularly relevant to the cited Johnson '277 patent as this document states that further heating

methods (electric resistance heating, arc discharge) are equivalent to laser heating and electron beam heating. See, Johnson '277 col. 2, lines 2-20. It is respectfully submitted that if the Primary Examiner's arguments in regard to equivalence in the nano-particle producing device of the Johnson '277 patent that these other heating methods (resistance and arc discharge) would also be the equivalent to the Nasser-Ghodsi laser heating as well—which they are not.

Reconsideration of claims 45-68 is requested.

Summary

This amendment is in response to the Office Action mailed January 28, 2008. Claims 1-41 and 43 are now canceled. Claims 42 and 44 were previously withdrawn but applicants respectfully request that they be rejoined upon the determination of allowable subject matter.

Claims 46, 63, 64, 65, 66, 67, and 68 have been amended. Claims 45-68 are in the application.

The Primary Examiner has determined that claims 63-68 contain allowable subject matter. Reconsideration of claims 45-68 is respectfully requested. Claims 63-67 have not been rewritten because Marchman '783 is not a proper reference and because Nasser-Ghodsi and Johnson do not render any of the claims unpatentable under 35 USC §103. The undersigned wishes to thank the Primary Examiner for the determination of allowable subject matter.

Reconsideration of claims 45-68 is requested.

The undersigned invites a telephone call from the Examiner if it would expedite the processing and examination of the application.

If there are any additional charges, or any overpayment, in connection with the filing of the amendment, the Commissioner is hereby authorized to charge any such deficiency, or credit any such overpayment, to Deposit Account No. 23-3060.

Respectfully submitted,

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